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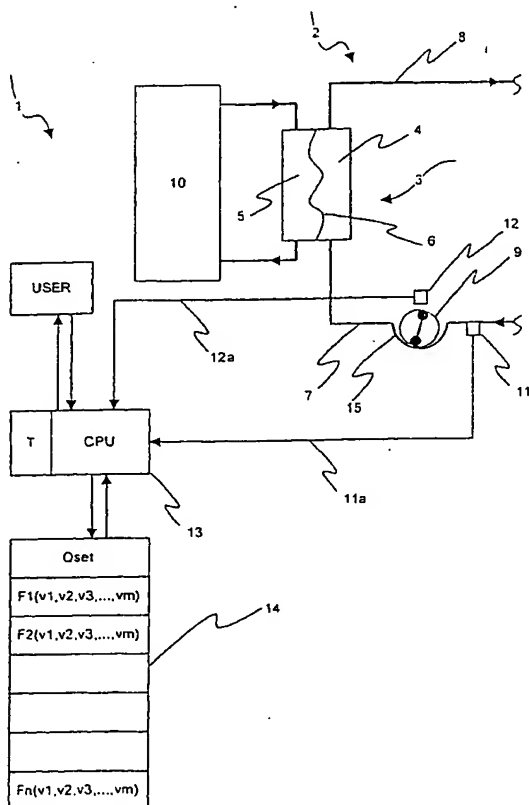
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(54) Title: EQUIPMENT FOR CONTROLLING BLOOD FLOW IN AN EXTRACORPOREAL BLOOD CIRCUIT



(57) Abstract: Equipment for controlling blood flow in an extra-corporeal blood circuit, comprising at least a first sensor (11), designed to measure an arterial pressure (Part) upstream of a peristaltic pump (9); at least a second sensor (12), designed to measure an angular velocity (Ω) of the peristaltic pump; a memory (14) designed to store at least one set value (Q_{set}) of the desired blood flow through the access branch, and a calibration function (F) in at least the variables ($v1$), related to the angular velocity (Ω) of the pump, ($v2$), related to the arterial pressure (Part) in the portion of the said access branch upstream of the peristaltic pump, ($v3$), related to an actual flow of blood (Q_{actual}) through the said access branch; and at least one control unit (13), capable of calculating an actual flow value (Q_{actual}) by applying the function F to the values of angular velocity and arterial pressure (Part, Ω) measured by the sensors; comparing the actual flow (Q_{actual}) with the desired flow (Q_{set}); and varying the angular velocity of the said peristaltic pump if the $Q_{actual} - Q_{set}$ lies outside a predetermined range.

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